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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE Biji Hayashi 50088-056 7197 03/19/2001 09/810,454 09/10/2003 7590 McDERMOTT, WILL & EMERY EXAMINER 600 13th Street, N.W. JOHNSON, JONATHAN J Washington, DC 20005-3096 ART UNIT PAPER NUMBER 1725

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) 09/810,454 HAYASHI **Advisory Action** Art Unit Examiner 1725 Jonathan Johnson -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]
a) \square The period for reply expires $\underline{3}$ months from the mailing date of the final rejection.
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).
1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
(a) They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) They present additional claims without canceling a corresponding number of finally rejected claims.
NOTE:
3. Applicant's reply has overcome the following rejection(s):
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet</u> .
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed:
Claim(s) objected to:
Claim(s) rejected:
Claim(s) withdrawn from consideration:
8. The proposed drawing correction filed on is a) approved or b) disapproved by the Examiner.
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s)
10. Other:

Continuation of 5. does NOT place the application in condition for allowance because: Applicant argues that Ulmer and Taizo cannot be combined with Kuriyama because Kuriyama is directed towards connecting fuse wires, not flip chip bonding. The examiner disagrees. A stated in the previous office action, a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cer denied, 469 U.S. 851 (1984). In the instant case, it is the examiner's position that, when reading Kuriyama as a whole, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Ulmer and Taizo to utilize the particular gas of Kuriyama in order to prevent oxidation of the bonding surfaces (see Kuriyama Column 5, Lines 15-45). Although it is true that Kuriyama deals with fusing wires and not flip chip bonding, it is the examiner's position that this is a distinction without a real difference. Kuriyama, Ulmer, and Taizo all deal with semiconductor manufacturing, in particular all three prior art references deal with techniques to ultrasonically bond leads to pads. Kuriyama teaches using a particular gas to prevent oxidation of the bonding surfaces during ultrasonic bonding. The examiner finds this is strong motivation to find an expectation from the prior art that the claimed invention will have the same or a similar utility as applicant's invention.

Additionally, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871

(CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant next argues that Taizo does not teach the bonding head is moved along a circular locus. In addition to the response made in the previous office action, the examiner would like to point out that the final rejection does not rely on Taizo to teach this limitation. The final rejection instead relies on Uno to teach this limitation. The rejection is maintained despite applicant's traversal..